

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).
2. (previously presented): The insulation varnish according to claim 9, in which the thermoplastic or thermosetting resin is selected from the group consisting of: polyamide imide (PAI), polyester imide (PEI), polyimide (PI), polyester (PE), polyurethane (PU), polyvinylacetal (PVA), and mixtures thereof.
3. (previously presented): The insulation varnish according to claim 9, in which the copolymer is obtained by adding 10% to 50% by weight of alkoxysilane.
4. (previously presented): The insulation varnish according to claim 9, in which the alkoxysilane is selected from tetraalkoxysilanes and trialkoxysilanes.
5. (previously presented): The insulation varnish according to claim 9, in which the mineral filler is selected from oxides and nitrides of B, Al, Ti, Zn, Zr, Cr, and Fe.
6. (previously presented): The insulation varnish according to claim 9, in which the mineral filler is selected from silicates.
7. (previously presented): The insulation varnish according to claim 9, comprising 2% to 20% by weight of mineral filler.

8. (previously presented): The insulation varnish according to claim 9, in which the mineral filler has a specific surface area greater than $40 \text{ m}^2/\text{g}$.

9. (currently amended): An insulation varnish for a winding wire, the varnish comprising a composition comprising: a) a copolymer obtained from a thermoplastic or thermosetting resin and at least one alkoxysilane; and b) a mineral filler selected from compounds of B, Al, Ti, Zn, Zr, Cr, Fe, and silicates, and mixtures thereof, the insulation varnish enabling the winding wire to withstand partial discharges;

wherein the winding wire is able to withstand peak-to-peak voltages of up to 3 kV at a frequency of up to 20 kHz with rise times of up to $1 \text{ kV}/\mu\text{s}$ at a temperature of up to 180°C .

10. (previously presented): A method of manufacturing an insulation varnish in accordance with claim 9, the method comprising the following steps: copolymerizing the thermoplastic or thermosetting resin with at least one alkoxysilane; adding a mineral filler selected from compounds of B, Al, Ti, Zn, Zr, Cr, Fe, silicates, and mixtures thereof; and homogenizing.

11. (original): A method according to claim 10, in which synthesis is performed in a solvent selected from ortho-cresyl, meta-cresyl, para-cresyl, cresylic acid, N-methylpyrrolidone, dimethylacetamide (DMAC), and mixtures thereof.

12. (original): A method according to claim 10, in which the reaction is performed in the presence of a catalyst selected from pTSA, dibutyltin, and a polysiloxane.

13. (previously presented): A method of manufacturing a winding wire, the method comprising the following steps: applying the insulation varnish in accordance with claim 9 on the wire; and setting the varnish.

14. (currently amended): A winding wire obtained by ~~the method of claim 13~~ a method comprising applying an insulation varnish on the wire and setting the varnish,

wherein the varnish enables the winding wire to withstand partial discharges and comprises a composition comprising:

a) a copolymer obtained from a thermoplastic or thermosetting resin and at least one alkoxysilane; and

b) a mineral filler selected from compounds of B, Al, Ti, Zn, Zr, Cr, Fe, and silicates, and mixtures thereof;

and wherein the winding wire is able to withstand peak-to-peak voltages of up to 3 kV at a frequency of up to 20 kHz with rise times of up to 1 kV/ μ s at a temperature of up to 180 °C.

15. (previously presented): A coil comprising a conductor wire covered in the insulation varnish in accordance with claim 9.

16. (previously presented): The insulation varnish according to claim 3, in which the copolymer is obtained by adding 20% to 40% by weight of alkoxysilane.

17. (previously presented): The insulation varnish according to claim 4, in which the tetraalkoxysilane is tetraethoxysilane (TEOS) and the trialkoxysilane is selected from the group consisting of trimethoxysilane and aminopropyl-trimethoxysilane.

18. (previously presented): The insulation varnish according to claim 5, in which the mineral filler is titanium dioxide.

19. (previously presented): The insulation varnish according to claim 6, in which the silicate is selected from the group consisting of clays, nanocomposite clays, and mica.

20. (previously presented): The insulation varnish according to claim 7, comprising 5% to 15% by weight of mineral filler.

21-22. (canceled).

23. (new): The winding wire according to claim 14, in which the thermoplastic or thermosetting resin is selected from the group consisting of: polyamide imide (PAI), polyester imide (PEI), polyimide (PI), polyester (PE), polyurethane (PU), polyvinylacetal (PVA), and mixtures thereof.

24. (new): The winding wire according to claim 14, in which the copolymer is obtained by adding 10% to 50% by weight of alkoxysilane.

25. (new): The winding wire according to claim 14, in which the alkoxysilane is selected from tetraalkoxysilanes and trialkoxysilanes.

26. (new): The winding wire according to claim 14, in which the mineral filler is selected from oxides and nitrides of B, Al, Ti, Zn, Zr, Cr, and Fe.

27. (new): The winding wire according to claim 14, in which the mineral filler is selected from silicates.

28. (new): The winding wire according to claim 14, comprising 2% to 20% by weight of mineral filler.

29. (new): The winding wire according to claim 14, in which the mineral filler has a specific surface area greater than 40 m²/g.

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30. (new): The winding wire according to claim 24, in which the copolymer is obtained by adding 20% to 40% by weight of alkoxysilane.

31. (new): The winding wire according to claim 25, in which the tetraalkoxysilane is tetraethoxysilane (TEOS) and the trialkoxysilane is selected from the group consisting of trimethoxysilane and aminopropyl-trimethoxysilane.

32. (new): The winding wire according to claim 26, in which the mineral filler is titanium dioxide.

33. (new): The winding wire according to claim 27, in which the silicate is selected from the group consisting of clays, nanocomposite clays, and mica.

34. (new): The winding wire according to claim 28, comprising 5% to 15% by weight of mineral filler.